REMARKS

Prior to entry of this amendment, Claims 1-33 were pending in this application. By this amendment, Claims 1-8, 12-18, 22-28 and 30-31 have been amended. The claim amendments were made merely to use more consistent terminology throughout the claims and clarify features that were disclosed and claimed in the application as originally filed. The amendments to the claims do not add any new matter to this application. No new claims are added are cancelled. All issues raised in the Final Office Action mailed July 2, 2004 are addressed hereinafter.

I. Summary Of The Rejections

Claims 1-3 and 9-11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 6,195,694 to Chen et al. ("*Chen*") in view of U.S. Pat. No. 6,571,201 to Royal, Jr. et al. ("*Royal*")

Claims 4-5, 8 and 12-14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Chen* and *Royal*, further in view of U.S. Pat. No. 5,832,503 to Malik et al. ("*Malik*")

Claims 6-7 and 15-16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Chen*, *Royal* and *Malik*, further in view of U.S. Pat. No. 5,790,789 to Suarez. ("*Suarez*")

Claims 17-31 stand rejected on the same rationale as claims 1-16.

Claims 32-33 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 6,553,403 to Jarriel et al. ("*Jarriel*"), in view of *Malik*.

II. Summary of *Chen*

Chen is directed to a system for delivering application files (configuration sets) from a server to a remote kiosk in order to configure the kiosk to perform a specific application. As shown in Fig. 5 of *Chen*, a configuration set 175 may be comprised of a plurality of HTML files

500. (Col. 8, lns 33-35). Logic in each of the application files (175, 500) can change which application files are executed and whether or not each file in a configuration set is executed. (Col. 8, lns 50-55).

Application files 175/500 may include at least one embedded control program 620. (Col. 9, lns 19-21). Significantly, these control programs are **content specific processes** (e.g. banking, car rental, merchandise purchasing, etc.). (Col. 5, lns 5-6). These content specific processes use local APIs associated with respective input/output devices of the kiosk to control the local devices in a way that is specific to the content of the application. (Col. 5, lns 8-12) For example, the embedded control functions 620 may include applets that call one or more local API functions 680 to operate a given subset of devices. (Col. 10, lns 5-6). The local API functions 680 are specifically designed to control any given device or function in the kiosk. (Col. 11, lns 65-68).

The server in *Chen* provides specific application files to configure the kiosk based on which devices the kiosk provides and/or which devices are operable. Different kiosk designs and or operational situations can be configured by appropriate choice of application files at the server for the respective application configuration. (Col. 13, lns 16-22).

III. Claims 1-31

Independent claims 1, 17, 24, 26, 27 and 30 are similar, and representative claim 1 is discussed in detail herein. The discussion of claim 1 applies to claims 17, 24, 26, 27 and 30.

Claim 1 of the present application requires the following steps:

- receiving a request from the network device to provide configuration information;

- retrieving a **template** describing a device configuration, wherein the template comprises **symbolic reference to** one or more **parameters** that may receive values **specific** to a **particular device**;
- retrieving one or more values of **parameters specific to the network device**;
- **creating** and **storing** a **device-specific instance** of the configuration information based on the **template** and the **values of parameters** that is **device-specific to said network device**.

Chen does not teach each and every element of these required steps.

The claimed invention is directed to a method of generating a **device-specific instance of configuration information** from a **template**. The basic process performed by one example embodiment of the claimed invention is described at Page 13, line 20 – Page 14, line 9 and Page 23, line 22 – Page 24, line 2. A network device makes a request for device configuration information from a Configuration Server. The Configuration Server retrieves a common parameterized configuration template, and parameter values specific to the network device. Upon retrieval, the template contains symbolic parameter references but no actual values. An instance of configuration information specific to the network device is created by substituting symbolic parameter references in the configuration template with the retrieved parameter values specific to the network device.

As described on Page 10, lines 16-22, Page 25, lines 8-18 and Page 34, lines 8-15 of the present specification, in one example embodiment a configuration template generally describes a configuration that may be applied to one or more devices. The configuration template may consist of a set of one or more CLI commands and zero or more parameters that may be specified for a particular device ("instantiated"). The configuration template parameters are resolved into specific values applicable to a particular device, resulting in a complete set of fully-instantiated

configuration information. An example of a configuration template is shown on Pages 34-36 in Table 13.

The Office Action asserts that application file 500 of *Chen* teaches a template, Col. 8, lines 46-67 and Col. 9, lines 1-7 of *Chen* teach retrieving device-specific parameters, and Col. 8, lines 1-13 and Col. 9, lines 17-43 teach creating a device-specific instance of configuration information based on the template and values of parameters. Applicants disagree.

Claim 1 specifically requires a template having one or more parameters. Nowhere in *Chen* is it suggested that application files 500 have parameters.

Claim 1 specifically requires retrieving parameters specific to the network device, and creating a device-specific instance of configuration information based on the template and the retrieved parameters. The Office Action asserts that configuration set 175 contains customized HTML files. However, nowhere in *Chen* is it suggested that the HTML files are customized, much less creating a device-specific instance of configuration information based on a template and parameter values specific to the network device. *Chen* does not teach parameter substitution at all.

Instead of parameterized template, Col. 9, lines 46-67 and Col. 9, lines 1-7 of *Chen* teach the use of multiple application files to configure a kiosk to perform a specific application. *Chen* teaches that "the server can determine which ... application files to send to the kiosk to enable the installed or operational input/output devices and not to enable (configure) the uninstalled or faulty devices" (Col. 7, lns 36-40), and that "logic in each of the application files and/or user actions can change which application files are executed" and "by executing the application files, the browser selects and controls one or more of the devices." (Col. 8, lns 51-56) Therefore, the "customized" configuration set provided by *Chen* consists of multiple selected application files that enable a kiosk to perform a particular application, not a single device-specific instance of

configuration information created specifically for the network device to be configured, as required by the claimed invention. No parameter value substitution is performed in the application files of *Chen*.

Selecting and controlling devices on a kiosk through the selection of multiple application files is not equivalent to retrieving device-specific parameters, and instantiating the configuration template with those values to create a device-specific instance of configuration information. Claim 1 uses a single device-specific instance of a parameterized configuration template to configure a network device. The multiple application files of *Chen* do not teach or suggest these elements of claim 1.

Furthermore, *Chen* teaches away from Claim 1. Col. 13, lns 58-65 of *Chen* teaches that "one application (application file 500) can be written on a server that can be used by a large number of 'thin' kiosks on a network connected to the server.... No application specific software has to be designed for any of the 'thin' kiosks on the network." In *Chen*, the application file can be used by any number of kiosks without modification. In Claim 1, a **device-specific instance** of configuration information is created for each network device that is specific to that network device. Rather than attempting to provide a universal application file as in *Chen*, the present claims recite that a specific instance of configuration information is created for the network device requesting the configuration.

Independent claims 17, 24, 26, 27 and 30 all feature that a device-specific instance of configuration information, based on a configuration template and parameter values specific to the network device, is used to configure the network device, and are patentable over the cited art for the same reasons as claim 1.

Dependent claims 2-16, 18-23, 25, 28-29 and 31 all include the limitations of the independent claims by virtue of their dependence. Therefore these dependent claims are

patentable over the cited art for at least the reasons set forth herein with respect to claim 1. Furthermore, the dependent claims recite additional limitations that independently render them patentable over the cited art. In view of the patentability of the independent claims, only some of the dependent claims are further argued at this time to expedite prosecution.

Claims 9-11 and 19-21

Dependent claims 9-11 and 19-21 recite that the request from the network device includes a unique identifier of the network device. The Office Action asserts that the "HTTP request contains two IP addresses, one the identifier of the network device requesting, and the other the identifier of the server providing configuration information (i.e., source and destination IP addresses)." However, an IP address is not a **unique** identifier. As is known to those skilled in the art, many IP addresses are not static. For example, many corporate networked and online services use a pool of leased IP addresses to economize on the number of IP addresses they use. In this situation, an IP address may be assigned dynamically from a pool of IP addresses, and a particular device may receive several different addresses over time.

As the current specification describes at Page 13, lines 2-25, when the network device issues an HTTP get request to the Configuration Service, it specifically provides its token to **uniquely** identify itself. The claims do not use the source IP address in the HTTP request as an identifier.

As described at Page 22, line 25 – Page 23, line 21, the unique identifier is used by the Configuration Service to locate a configuration template associated with the network device and to locate parameter values specific to the network device. An example of an identifier that uniquely identifies the network device may be a router hostname. Because a source IP address in an HTTP request may not be consistent or static, the source IP address cannot be used to uniquely identify a configuration template.

None of the cited references teach or suggest including a unique identifier in a configuration request. Therefore, claims 9-11 and 19-21 are patentable over the cited art.

Claims 4-6 and 14

Claims 4-6 require "syntax-checking the device-specific instance of configuration information to determine whether the configuration commands therein conform to a command language that is understood by the network device."

In rejecting claims 4-5, the Office Action takes Official Notice that "both the concepts and advantages of checking and ensuring program code is syntactically correct before executing the code" are well known.

However, these claims require more than just ensuring that program code is syntactically correct. Claims 4-6 specifically require the step of syntax-checking the **configuration commands at the network device**.

As is described at Page 25, line 21 – Page 26, line 11 of the present specification, in one embodiment the configuration service first determines whether the XML configuration information is well-formed and that the text of the XML configuration information is syntactically correct before providing the XML configuration information to the network device. When the XML configuration information is received by the network device, the network device then checks for the syntactic correctness of the embedded commands. "Carrying out the checks of well-formedness and syntactic correctness before deployment of the configuration information is useful in placing the burden of a potentially intensive computation load on the Configuration Server, rather than the device." (Page 14, lines 21-24). The network device then parses out the CLI commands from the XML configuration information and performs a syntax check of just the configuration commands.

It is not generally known to those skilled in the art, nor do the cited references teach or suggest, that a network device perform syntax checking of **only** configuration commands in an instance of configuration information that is separately previously checked for well-formedness and syntactic correctness by a configuration server before being passed to the network device, thereby lessening the syntax checking burden on the network device.

Furthermore, as is stated at Page 8, lines 2-5 of the present specification, in one embodiment, network devices parse XML data and convert the XML data into the native interface for the device. The configuration commands may be specific to the network device. This enables one embodiment to configure all of the features of a device that are available using the native command language of the device. Claim 14 requires "a parser of an operating system that is executed by the network device" to syntactically check the configuration commands in the set of configuration information. As described on Page 15, lines 13-21 of the present application, in one embodiment XML tags identifying CLI strings are removed from the XML configuration information, and the remaining information (each line of which constitutes a CLI command string) is applied to a CLI parser function within the operating system.

The Office Action asserts that "XML tags included within the XML-formatted data allow either the fuel dispense 110, i.e. the network device, or the remote system 130 to easily parse the received data using an XML processor 206 for subsequent processing or use." This is not applicable to claim 14. Claim 14 requires **a parser of an operating system** to syntactically check the configuration commands. Nowhere in *Chen*, *Royal* or *Malik* is parser of an operating system of the network device used for any purpose.

Applicants respectfully submit that claims 4-6 and 14 are patentable over the cited art, and request that the rejection under 103(a) be withdrawn.

Claims 6-7, 15-16 and 18

Claims 6 and 7 require "generating an event to an event service to which the plurality of network devices subscribe." Claim 15 requires "publishing the partial configuration to an event service that is communicatively coupled to the one or more network devices." Claim 16 requires "publishing a partial configuration trigger event to an event service that is communicatively coupled to the one or more network devices." Claim 18 requires "generating a status event to an event service to which the plurality of network devices subscribe."

The Office Action asserts that *Suarez* teaches event services. However, *Suarez* is directed to a **distributed** computing system comprising a plurality of hosts, a communication network for exchanging information and data between the hosts, and a plurality of services distributed through the computer system.

A *prima facie* case of obviousness re quires that there is motivation in the cited references to suggest or motivate a person skilled in the art to combine the teachings of the different references. As stated by the Court of Appeals for the Federal Circuit, "[t]o imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of hindsight syndrome wherein that which only the inventor taught is used against its teacher." W. L. Gore & Assocs. V. Garlock, Inc., 721 F.2d 1540, 1553, 200 USPQ 303, 312-13 (Fed. Cir. 1983). *Chen* discloses that a server system can send application files to one or more kiosks on the network, and that kiosks can request application files from a server system. However, the kiosks in *Chen* cannot and do not communicate with each other for any purpose. There is no motivation anywhere in *Chen* to include an Event Service that would enable the kiosks to send event notifications to each other. Likewise, there is no motivation in *Royal* for the fuel dispensers to send event notifications to other fuel dispensers.

An obviousness rejection also is not appropriate if substantial reconstruction or redesign of the prior art references is necessary to arrive at the invention, as is the case with the cited references, with respect to Claims 6-7 , 15-16 and 18. (See *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959). None of the cited references convey or suggest the integration of an Event Service. The system of *Chen* would have to be substantially redesigned, as would the systems of *Royal* and *Malik*, in order to provide for an Event Service as taught by *Suarez*.

For example, functionality of the kiosks in *Chen* would have to be substantially reconstructed to provide for the inclusion of an Event Service. As noted above, *Chen* teaches away from including extra functionality in a kiosk at Col. 13, lines 58-68. Here, *Chen* teaches a "thin-client" kiosk that requires no application specific software to be pre-installed, thereby allowing for a cost-effective method of deploying a large number of kiosks. Likewise, providing Event Service functionality in a fuel dispenser of *Royal* would unnecessarily increase the cost of a fuel dispenser.

The need for such reconstruction in each of the cited references plainly shows that the references lack motivation.

If a proposed modification would render the prior art invention being modified unsatisfactory for its intended purposes, then there is no suggestion or motivation to make the proposed modification. In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed Cir. 1984) Here, the addition of an Event Service would needlessly increase the cost and complexity of a kiosk in *Chen* or a fuel dispenser in *Royal*, and therefore there is no suggestion or motivation in these references to include the Event Service of *Suarez*.

The Federal Circuit has recently reiterated that "the tests of whether to combine references need to be applied rigorously." McGinley v. Franklin Sports Inc., 262 F.3d 1339, 60 USPQ 2d 1001, 1008 (Fed. Cir. 2001). Broad, conclusory statements regarding the teaching of

multiple references, standing alone, are not "evidence" (McElmurray v. Arkansas Power & Light Co., 995 F.2d 1576, 1578, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993)), and a general relationship between fields of the prior art references is insufficient to suggest the motivation to combine such references (In re Dembiczak, 175 F.3d 994, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999)).

Guided by the foregoing principles, the Office Action statement that "it would have been obvious to one having ordinary skills in the art ... to combine the teaching of Chen-Royal-Malik and Suarez to generate an event to an event service announcing that the configuration commands conform to correct syntax since such methods were conventionally employed in the art to allow the testing of one device before applying the configuration to many to make sure that only one device has the chance of entering an error state instead of the entire network if configuration commands are faulty" does not meet the standard for an obviousness rejection under 35 U.S.C. § 103. The stated goals are so general and vague that they cannot rationalize the specific invention that is claimed. It is well-settled that "[i]t is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious" and that "[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention" (In re Fritch, 972 F.2d 1260, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992); quoting In re Fine, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988)). It appears that impermissible hindsight was used to generate the foregoing statement of motivation. Applicants respectfully request the withdrawal of the rejection of claims 6-7, 15-16 and 18 on at least this basis.

In view of the foregoing, it is respectfully submitted that Claims 1-31 are patentable over the cited references. Accordingly, reconsideration and withdrawal of the rejection of Claims 1-31 under 35 U.S.C. § 103(a) is respectfully requested.

IV. Claims 32-33

Claims 32-33 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Jarriel* in view of *Malik*. This rejection is herein respectfully traversed.

Claim 32 is directed to configuring a computer program application to use **network topology information**, as described for an embodiment in the present specification at page 46. *Jarriel* is directed to managing a large distributed computer system through distributed monitors that use events to convey status changes to monitored objects. *Jarriel* does not disclose any methods of configuring a computer program application to use network topology information.

Claim 32 requires "receiving a request for **network topology information** from the **computer program application"** that is being configured to use to use the network topology information. The section of *Jarriel* cited in the Office Action (Col. 7, lines 58-65) as teaching this required element of claim 32 actually teaches a "distributed monitor may be optionally configured to perform basic HTTP server duties (e.g. servicing an HTTP GET requests, where the URL of the GET may be a DM topology request...) The HTTP interface 52f is responsible for turning the requested data into HTML and returns it to the calling browser." *Jarriel* further explains at Col. 8, lines 61-64 that "a distributed monitor (DM) within a given local runtime environment uses "events" to convey status changes to monitored objects." *Jarriel* describes "topology" information at Col. 9, lns 63-68: "The route table for any given DM will be computed based on the **event topology** data which is available at the managing server and each LCF gateway." (emphasis added) The section of *Jarriel* cited in the Office Action is referring to this **event** topology information, not **network** topology information as required by claims 32-33.

Jarriel does not teach using any type of network topology information for any purpose, much less providing resolved network topology information to a configuration agent within a computer application program that is configured to re-configure the computer program

application to operate with the resolved network topology, as required by claim 32. It is therefore respectfully submitted that Claims 32-33 are not taught or suggested by *Jarriel* and *Malik*, alone or in combination, and are patentable over *Jarriel* and *Malik*. Accordingly, reconsideration and withdrawal of the rejection of Claims 32-33 under 35 U.S.C. § 103(a) is respectfully requested.

V. Conclusion

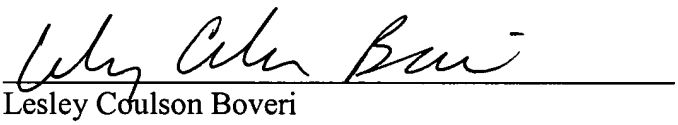
For the reasons set forth above, it is respectfully submitted that all of the pending claims are now in condition for allowance. Therefore, the issuance of a formal Notice of Allowance is believed next in order, and that action is most earnestly solicited.

The Examiner is respectfully requested to contact the undersigned by telephone if it is believed that such contact would further the examination of the present application. Please charge any shortages in fees to Deposit Account No. 50-1302.

Respectfully submitted,

HICKMAN PALERMO TRUONG & BECKER LLP

Dated: October 28, 2004



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